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NOTES ON GEOGRAPHIC DISTRIBUTION

# Reptilia, Amphisbaenidae, *Monopeltis schoutedeni* de Witte, 1933: First record from Gabon, with an updated key to Gabonese worm lizards

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**ABSTRACT:** The amphisbaenian *Monopeltis schoutedeni* is reported for the first time from Gabon based on a single individual from the extreme southeastern part of the country. The species was formerly known only from the Republic of Congo and the Democratic Republic of Congo. It is the 4th amphisbaenian and the 123rd reptile species recorded from Gabon. An identification key to Gabon amphisbaenians is provided.

The amphisbaenian fauna of Gabon is so far known to include three species belonging to the Amphisbaenidae: the endemic *Cynisca bifrontalis* (Boulenger, 1906) and *C. haugi* (Mocquard, 1904), and the near-endemic *Monopeltis galeata* (Hallowell, 1852) (Pauwels and Vande weghe 2008). All three species occur in the coastal lowland rainforests of Gabon, *Monopeltis galeata* being also known from coastal mainland Equatorial Guinea and Corisco Island (Gans and Lehman 1973). While *Monopeltis galeata* is relatively common in western Gabon, having been found near sea level in the provinces of Estuaire, Moyen-Ogooué and Ogooué-Maritime provinces, *Cynisca haugi* is still known only from its holotype, as was *C. bifrontalis* until its recent rediscovery, a century after its original description (Branch *et al.* 2003). The two latter *Cynisca* species are known only from Moyen-Ogooué and Ogooué-Maritime provinces, respectively (Pauwels and Vande weghe 2008). *Monopeltis jugularis* Peters, 1880 was erroneously cited from Gabon and consequently deleted from the national reptile list (see Pauwels and Vande weghe 2008), but its presence in Gabon is actually zoogeographically possible.

No amphisbaenian was thus recorded from the interior of Gabon until one of us (JLA) collected on January 25th, 2009 one individual 10 km north-east of Lékoni (also spelled Léconi), Département des Plateaux, Haut-Ogooué Province, in extreme southeastern Gabon. It was found while it was rapidly crawling on a sandy road at around 01:00 p. m. in sunny conditions in a savanna area. The specimen was preserved in 70° ethanol and integrated in the herpetological collections of the Institut Royal des Sciences naturelles de Belgique, under the number IRSNB 17948. It shows a depressed snout with a sharp horizontal edge, nostrils pierced in small nasal scales on the lower snout surface, and longitudinally enlarged segments on the pectoral region, as is typical for the genus *Monopeltis*.

The dorsal head surface is heavily keratinized and shows two large, fused shields and a pair of occipitals (Figure 1). The ocular scale is small, the eye is indistinguishable (Figure 2). The rostral separates the nasals and borders the nostrils; the nasals are elongate but do not reach the preoculars (Figure 3). There are three supralabials, the second of which is the longest and the third the highest. The mental scale is small; the postmental is large, in contact with the first and second infralabials.

**FIGURE 1.** Dorsal head view of *Monopeltis schoutedeni* (IRSNB 17948) from near Lékoni, Gabon.

**FIGURE 2.** Lateral head view of *Monopeltis schoutedeni* (IRSNB 17948) from near Lékoni, Gabon.

There are 3 infralabials on each side, the posterior one being much larger than the two anterior ones. There are 4 chinshields, the outer ones in contact with the second and third infralabials. There are 6 parallel pectoral plates. The two median ventral segments are about two and a half times as broad as long. The snout-vent length is 315 mm; the tail length 44 mm, and the tail thus represents 12% of the total length of 359 mm. The midbody diameter is 10 mm. There are 269 body annuli from the first one following the pectoral plates to the pore-bearing annulus, the latter excluded in the count (ventrally bifurcate annuli counted as single) (Figure 4). There are additionally 8 lateral anterior annuli bordering the pectoral plates, *i.e.*, a total number of body annuli of 277. There is a total of 12 precloacal pores, arranged in a continuous left series of 6 separated by two minute median scales from a continuous right series of 6 (Figure 5). There are 28 tail annuli (terminal cap not included) (Figure 4). All these characters adequately fit the descriptions of *Monopeltis schoutedeni* de Witte, 1933 by de Witte (1933), Loveridge (1941) and Gans and Lehman (1973).

The new specimen is easily distinguished from *Monopeltis galeata* and *M. jugularis* (see Table 1 in Gans and Lehman 1973) by its high number of body and caudal annuli, and its high number of precloacal pores (pores absent in *M. jugularis*). Its high number of body and tail annuli and of precloacal pores also precludes an identification as *Monopeltis guentheri* Boulenger, 1885, a closely related and sympatric species.

**FIGURE 3.** Ventral head view of *Monopeltis schoutedeni* (IRSNB 17948) from near Lékoni, Gabon.

**FIGURE 4.** General ventral view of *Monopeltis schoutedeni* (IRSNB 17948) from near Lékoni, Gabon.

**FIGURE 5.** Cloacal area of *Monopeltis schoutedeni* (IRSNB 17948) from near Lékoni, Gabon.

The closest locality from where *Monopeltis schoutedeni* is known is 'Diélé' (see Gans and Lehman 1973), situated at 01°40'56" S, 14°45'27" E in the Cuvette Region of the Republic of Congo, at *ca.* 50 km east of the new Gabonese locality. The type locality of the species, 'Kunungu' (see map in Gans and Lehman 1973), in Democratic Republic of Congo, is ca. 250 km east - southeast of the Gabonese locality.

Updated identification key to Gabon Amphisbaenia (modified from Broadley 2008; body annuli numbers for *Monopeltis* following Gans and Lehman's (1973) counting method, thus including the anterior lateral annuli bordering the pectoral plates):

1a. Snout rounded, without a sharp horizontal edge; nostril pierced laterally; segments of the pectoral region not differentiated; tail annuli 25-27. ..... 2 (*Cynisca*)
1b. Snout depressed with a sharp horizontal edge; nostril pierced in a small nasal on lower surface of snout; segments of the pectoral region longitudinally enlarged; tail annuli 15-29. ..... 3 (*Monopeltis*)

2a. Ocular shields discrete; 229-240 body annuli; 8-10 precloacal pores; autotomy site at 11$^{th}$ caudal annulus. ..... *Cynisca bifrontalis*
2b. Ocular shields fused to labials, preocular and prefrontals; 251 body annuli; no precloacal pores; autotomy site at 7$^{th}$ caudal annulus ..... *Cynisca haugi*

3a. Body annuli 219-233; precloacal pores 0 (females) / 2, rarely 3 (males); caudal annuli 15-20. ..... *Monopeltis galeata*
3b. Body annuli 273-289; precloacal pores 9-13; caudal annuli 25-29. ..... *Monopeltis schoutedeni*

The photographs provided here are the first of a live individual of *Monopeltis schoutedeni*. It is to be noted here that due to an editorial mistake, the photograph shown in Pauwels (2007), taken by the French ichthyologist Sébastien Lavoué in Rabi oilfields (Ogooué-Maritime Province, Gabon) and said to represent a *Cynisca bifrontalis*, actually shows a live adult *Monopeltis galeata* (both species live in strict syntopy at that locality). Schouteden's Worm Lizard is the 123$^{rd}$ reptile species documented to date from Gabon (Pauwels and Vande weghe 2008).

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